Please amend the claims as follows:

1. (Currently Amended) A method of manufacturing an optical fibre according to

using a plasma chemical vapour deposition (PCVD) process by carrying out one or more [[a]]

chemical vapour deposition reactions in a substrate tube, which said method comprises the

following steps:

i) supplying one or more doped or undoped glass-forming precursors to the substrate

tube,

ii) supplying a stoichiometric excess of oxygen to the substrate tube,

iii) setting up a reaction the one or more reactions in the substrate tube between the

reactants supplied in steps i) and ii) to form a plasma within the substrate tube so as to effect

the deposition of one or more glass layers on the an interior of the substrate tube,

iv) subjecting the substrate tube thus coated in step iii) to a collapsing process so as to

form a preform, and finally

v) drawing said preform into an optical fibre, wherein the a Reynolds number is in

accordance with the formula 120<Re<285 during the deposition process according to step

iii), wherein the Reynolds number is calculated on the basis of the reactants supplied to the

substrate tube in step i) and step ii), under the temperature and pressure conditions that

prevail a temperature of 1000-1150 °C and a pressure of 4-35 mbar in the interior of the

substrate tube during step iii),

wherein a deposition rate of at least 2 g/min is used in step iii), and wherein the

stoichiometric excess of oxygen used during step ii) ranges from 1.8-5.0.

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- 2.-5. (Canceled)
- 6. (Currently Amended) A method according to claim [[5]] 1, wherein the a plasma zone is moved with respect to the substrate tube during step iii).
 - 7.-18. (Canceled)